

ABSTRACT OF THE DISCLOSURE

A metal container to be filled with a halogen containing gas, with the inner surface processed with a polishing agent. The gas has a reduced purity decline by the increase of the water content or impurities from the inner surface of the container which is absorbed by the gas over the passage of time. The inner surface processing method is improved such that the value of dividing the area of the Si2s peak by the area of the Fe2p_{3/2} peak in the X-ray photoelectron spectrum of the gas container inner surface with the inner surface process with a polishing agent applied is 0.3 or less.